

Application No.: 10/666,558

Docket No.: 36507-193188

**REMARKS**

Reconsideration of this Application is respectfully requested. In response to the Office Action mailed September 27, 2005, Applicants have canceled claim 8 without prejudice or disclaimer, added new claim 33, and amended claims 1-7, 9-22, and 25-31, and these amendments are believed to be fully supported and contain no new matter. Claims 1-33 are pending.

Based on the above Amendment and the following Remarks, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding objections and rejections.

**Rejection under 35 U.S.C. § 112, 1<sup>st</sup> ¶**

The Examiner at paragraph 2 of the office action rejects claims 12-30 under 35 U.S.C. § 112, 1<sup>st</sup> ¶. The Action asserts that the Application is not described in such a way as to enable one of ordinary skill in the art how to make and/or use the invention. Applicants respectfully disagree. As will be apparent to those skilled in the relevant art in reviewing FIG. 8A, MIP probe 810 as labeled in FIG. 8A, and as described in ¶ 132 of Applicant's Specification, a MIP is a device including a housing and a permeable membrane. As incorporated by reference, U.S. Patent 5,639,956, ("the '956 Patent") has been provided to provide additional details of an exemplary MIP. As will be apparent to those skilled in the relevant art, the MIP probe is referred to in the '956 Patent as a permeable membrane probe including a housing 12 including a probe 10, and as the Abstract and col. 2, lines 10-15 of the '956 Patent note, a permeable membrane sensor probe has a housing [12] with a gas permeable membrane [54]. Applicants note however, that the rejection is now moot as claims 12-30 have been amended to now even more clearly claim Applicants' invention.

**Amendments to the Specification**

Applicants amend the specification to correct several minor typographical errors. Specifically, Applicant has amended the specification to replace reference character "410" with "426" for the dipole electrical conductivity sensor. The dipole electrical conductivity sensor is further described on page 23 starting at line 5. Since the dipole electrical conductivity sensor was already recited in the application and depicted in the drawings as reference numeral "426," no amendments to the drawings are necessary.

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Also, Applicants amend MIP 402 to MIP 400.

Finally, Applicants have updated the status of the application in paragraphs [0003]-[0005] to reflect the current status of the related applications.

**Rejections under 35 U.S.C. § 112, 2<sup>nd</sup> ¶**

On page 3, the Action rejects claims 12-30 as being indefinite. The Examiner asserts that the Membrane Interface Probe sensor is not adequately described. Applicants have amended claims 12-22 and claims 25-30, and accordingly believe that this rejection is now moot.

Claims 12-16 have been rejected as indefinite for their use of the words "diameter" and "larger." As clearly noted in Applicant's Specification and Figures, the diameter of cylindrical housing is at least about 2.125 inches (see paragraph 97 on page 22 of Applicant's Specification). Applicants have amended claims 12-16 and believe this rejection is also now moot.

Claim 12 is rejected as indefinite for use of the term "conventional." Claim 12 has been amended and this rejection is also now moot.

Claim 14 is rejected as indefinite on the last paragraph of page 3. Applicants have amended claim 14 and this rejection is now moot.

On page 4, claim 15 is rejected as being indefinite. Applicants have amended claim 15 and this rejection is now moot.

Claims 17 and 18 are also rejected as being indefinite. Applicants have amended claims 17 and 18 and this rejection is now moot.

Claim 19 is also rejected as being indefinite. Applicants have amended claim 19 and this rejection is now moot.

Claim 20 is also rejected as being indefinite. Applicants have amended claim 20 and this rejection is now moot.

On page 5, claim 23 is rejected as vague and indefinite. Applicant disagrees and notes that FIGs. 4A and 4B and page 23 of the Specification clearly set forth a removable conductivity nose assembly, as will be apparent to those skilled in the relevant art. A detailed discussion of conductivity dipoles is further described in the '956 Patent, the contents of which were incorporated by reference. Applicants respectfully request that the Examiner withdraw this rejection.

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Claim 27 is rejected as indefinite. Applicants have amended claim 27 and this rejection is now moot.

Claim 28 is rejected as indefinite. Applicants have amended claim 28 and this rejection is now moot. Further, Applicants note that FIG. 9C and the descriptions of FIG. 8B, 9A, 9B and 9C sufficiently describe the claim to render the claim definite, as will be apparent to those skilled in the relevant art.

Claim 31 was also rejected as indefinite. Applicants have amended claim 31 and this rejection is now moot.

For reasons discussed below, claims 12-30 are also allowable because of their dependence on allowable claim 1.

Claims 12-30 are believed to be in condition for allowance as amended and allowance thereof is respectfully requested.

#### **Rejections under 35 U.S.C. § 102 (b)**

On page 6, the Action rejects claims 1-11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,970,804 to Robbatt, Jr. (hereinafter "Robbatt"). Applicants respectfully traverse this rejection.

(A) For at least the following reasons, Robbatt does not anticipate amended claims 1 or 4.

Amended claim 1 recites "An enhanced scanning solutions module comprising: a flow control subsystem; a detector subsystem coupled to said flow control subsystem; a moisture separator subsystem coupled to said flow control subsystem; a sampling subsystem coupled to said flow control subsystem; and a software control subsystem coupled to at least one of said flow control subsystem, said detector subsystem, said dryer/moisture separator subsystem, and/or said sampling subsystem, wherein said flow control subsystem is adapted to be at least one of configured and/or reconfigured to use a plurality of operator-selectable measurement subsystems prior to exhaust." (Emphasis added). Similarly, amended claim 4 recites "An enhanced scanning solutions module comprising: a detector subsystem adapted to be selectably coupled to an in situ gas stream; a sampling subsystem adapted to be selectably coupled to the in situ gas stream; and a software control subsystem coupled to said detector subsystem, and said

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sampling subsystem, wherein the enhanced scanning solutions module is adapted to be at least one of configured and/or reconfigured to use a plurality of operator-selectable measurement subsystems prior to exhaust."

Robbatt teaches an apparatus for determining the presence or absence of a specific constituent in a mixture. Robbatt sets forth a thermal desorption unit including a body providing a desorption chamber, a removable end cap for closing the chamber, a desorber heating system arranged to heat the desorption chamber, a gas inlet to the desorption chamber, and a gas outlet from the desorption chamber. A valve assembly operates in a run mode to direct a carrier gas to the thermal desorption unit gas inlet, and serially couples the thermal desorption unit gas outlet to an inlet of a sample analysis instrument. The valve assembly also operates in a flush mode to direct the carrier gas to the inlet of the gas analysis instrument, directs a flushing gas to the thermal desorption unit gas inlet, and couples the thermal desorption unit gas outlet to an exhaust.

Robbatt does not teach or suggest a system which may be configured or re-configured to use a plurality of operator-selectable measurement subsystems prior to exhaust as required by claims 1 and 4, as amended. As illustrated clearly in Applicant's FIG. 9C, Applicant's scanning system is adapted to allow operator-selectable configuration and reconfiguration of a plurality of subsystems, advantageously allowing multiple paths, through multiple instruments including feedback and multiple stages of sampling and/or detection. Robbatt, on the other hand only allows a single sequential, serial processing of desorption chamber and detector. Robbatt is an example of a single measurement subsystem which could be used as one of the plurality of measurement subsystems in Applicants' claimed invention.

Therefore, amended claims 1 and 4 are in condition for allowance and allowance thereof is respectfully requested.

Claims 2-3 and 33, and 5-32, which depend from allowable claims 1 and 4, respectively, are also in condition for allowance because of their dependence on an allowable claim.

(B) For at least the following reasons, Robbatt does not teach or suggest the feature of amended claim 4. Claim 4 further requires selectable coupling to an in situ gas stream, which Robbatt also fails to teach or suggest. Robbatt takes as input a sample. Robbatt does not teach or

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suggest being coupled to a gas stream in situ. Thus for at least these reasons, claims 5-32 are also allowable as dependent upon an allowable claim.

(C) For at least the following reasons, Robbatt does not teach or suggest the feature of amended claim 5. Claim 5 further requires a moisture separator subsystem adapted to selectably couple to the in situ gas stream. Robbatt fails to teach or suggest selectably coupling a moisture separator subsystem.

(D) For at least the following reasons, Robbatt does not teach or suggest the feature of amended claim 9. Claim 9 further requires configuring based on particular conditions, or on-the-fly configuring. Robbatt fails to teach or suggest either of these features.

(E) Robbatt also fails to teach or suggest a removable trap as set forth in claim 26. Amended claim 26 recites, *inter alia* "a membrane interface probe (MIP) housing comprising an internal removable trap for the collection and/or concentration of one or more volatile organic compounds. Thus claim 26 is separately patentable for at least this reason.

(F) Robbatt also fails to teach or suggest a feedback as set forth in claim 33. As depicted in FIG. 9C, Applicants' invention of claim 33 includes a feedback to the flow control subsystem. For this separate reason, claim 33 is allowable over Robbatt.

#### Rejections under 35 U.S.C. § 102 (a)

On page 7, the Action rejects claims 1-32 under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,405,135 to Adriany (hereinafter "Adriany"). Applicants respectfully traverse this rejection.

For at least the following reasons, Adriany does not anticipate amended claims 1 or 4.

Adriany teaches an imbedded Internet sensor system for protecting real property from the consequences of subterranean chemical pollution. The system provides a permanent, in ground, real time monitoring alarm system for identifying an occurrence of contaminants in the subsurface of a

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property. An onsite processor controls a local network of sensors and a communication device relays the data to a remotely located database. The local network of sensors are made up of multiple acoustic wave sensors differentiated by sensor coatings configured into a sensor array. As a vapor contaminant passes across the surface of the surface acoustic wave sensor crystals, a shift is caused in the frequency of the acoustic wave. The shift is translated into an electronic signal that is communicated to the onsite processor, which in turn communicates the signal in the form of electronic data to a remote facility wherein remedial measures may be dispatched and appropriate parties notified. The method of dispatch and notification is provided by a Web site system accessible through the Internet. The system is provided as part of a pollution detection and notification service for which a customer pays a subscription fee.

Adriany does not teach or suggest a system including a flow control system or scanning solutions module which may be configured and/or re-configured to use a plurality of operator selectable measurement subsystems prior to exhaust as required by claims 1 and 4, as amended. Instead, Adriany is an alarm system, it merely sits and monitors and sets off an alarm in the event of detected pollution. Adriany has no flow control, it only monitors for detection of pollution. Adriany is not reconfigurable, it is secured in the soil in a fixed position.

Unlike Adriany, Applicants' invention may be configured and reconfigured to use various operator-selectable measurement subsystems to selectably couple various detection and sampling subsystems to an in situ gas stream. Adriany fails to teach or suggest on-the-fly reconfigurability to use a plurality of operator-selectable measurement subsystems.

Therefore, amended claims 1 and 4 are in condition for allowance and allowance thereof is respectfully requested.

Claims 2-3 and 33, and 5-32, which depend from allowable claims 1 and 4, respectively, are also in condition for allowance because of their dependence on an allowable claim.

Further, Adriany fails to teach or suggest claim 33. Applicants' claim 33 sets forth a feedback to the detector subsystem which allows operator-selectable reconfiguration based on said feedback. Adriany provides no feedback from any subsystem to a flow control subsystem, since Adriany has no flow control subsystem as set forth in Applicants' claimed invention.

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Accordingly, claims 1-33 are in condition for allowance and allowance thereof is respectfully requested.

**Conclusion**

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

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Respectfully submitted,

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